

Unapproved Minutes of the February 3, 2015
Sequence VG Surveillance Panel
Conference Call

The meeting was called to order by Chairman Andy Ritchie at 2:00 PM EST.

Mike McMillan agreed to take the minutes of the meeting.

A list of the attendees on the call is included as Attachment 1.

Chairman Ritchie listed the agenda items he would like to cover in this call:

- 1) Approval of the minutes from the January 13, 2015 Sequence VG Panel Conference Call
- 2) Report from Haltermann on progress in blending new fuel batch
- 3) Report from Statisticians Group on design of fuel approval matrix for new fuel batch
- 4) Update on VH and Chain Wear Test Development Task Force activities
- 5) Additional Old Business
- 6) New Business
- 7) Next meeting/call

Chairman Ritchie asked if there were any additions or corrections to the minutes from the January 13, 2015 VG Panel Conference Call. There being none, Ed Altman moved and Chris Mileti seconded a motion to approve the minutes. The motion was approved unanimously.

Chairman Ritchie then asked Mark Overaker to provide an update on progress in blending the new fuel batch. Mark indicated that most of the materials have been added to the tank, and that the last 3 or 4 truckloads necessary should be added to the tank by the end of this week. Chairman Ritchie asked Mark if he would make arrangements to send sufficient quantities of the finished fuel blend to the labs which will be participating in the fuel approval matrix as soon as possible after completion of blending. The new fuel batch will be designated DAO121.

Jo Martinez then went through the fuel batch matrix design generated by the Statistics Group. (See Attachment 2) The design is similar to the original design of the last fuel approval matrix before it was modified after the fuel had to be re-blended. Seven stands will be included: two each from SwRI and Intertek, and one from Lubrizol. Three oils are included: 940 (which replaces 925-2), 1009 and 1006-2. Three rows of five tests each for a total of 15 tests are included, with the suggestion that results be reviewed after each row is completed.

Chairman Ritchie asked each of the participating labs to indicate how soon they could be ready to begin matrix testing. Al Lopez from Intertek said they have two stands, one which needs calibration now but could be ready in two weeks, and the second which could be ready next week but which would go out of calibration after the first matrix run (unless the calibration period were to be extended). Dan Worcester from SwRI said their two stands are in calibration for the next seven tests, and they could be ready to start a matrix test next week. Chris Mileti said Lubrizol's stand will go out of calibration on February 23, and that after calibration they could be ready to start matrix testing on February 26 or 27.

Discussion then turned to whether it would be best to run Oil 940 as soon as possible to get an early read on whether the new fuel batch is severe enough. All Panel members seemed to agree that this was the best approach. After further discussion, it was agreed that each lab should run its test on Oil 940 as indicated in Row 1 of the proposed matrix as quickly as possible and before conducting any testing on Oil 1009. Lubrizol will complete its candidate run currently in progress, then run Oil 940, and then a calibration run before proceeding with additional matrix testing. SwRI will run Oil 940 in one of its stands as soon as the new fuel shipment arrives from Haltermann, and Intertek will do the same before needing a calibration test. Each of the labs will keep all Panel members apprised of its progress, and the results will be reviewed after completion of these three Oil 940 runs. Chairman Ritchie indicated that he might convene a Sequence V SP conference call prior to the next regularly scheduled call on March 3, if he feels that is necessary.

Switching subjects, Chairman Ritchie asked Ed Altman, who chairs the VH and Chain Wear test development activities, to provide a short update on those activities. Ed indicated that several conference calls of the test development group have taken place over the last three weeks. They have

decided to schedule build workshops in San Antonio from February 23-26 to discuss various issues relating to the test developments. Although plans have not been finalized, the thinking at this point is that the group would start with stand inspections at Intertek and SwRI (those stands intended to be in the matrices) on Tuesday of that week and the first part of Wednesday, if necessary. Then build workshops would proceed for the remainder of Wednesday and Thursday. Much of the discussion will focus on honing techniques and obtaining consistency in honing and other build variables across the various labs. Ed indicated he would schedule a conference call later this week or early next week to discuss the schedule and finalize planning for the workshops.

Old Business: There was no additional Old Business brought before the Panel.

New Business: There was no New Business brought before the Panel.

Next Meeting: The next VG Panel Conference Call is tentatively planned for Tuesday, March 3, 2015 at 2:00 PM EST. However, Chairman Ritchie may ask for an earlier date for the next call, depending on how soon results on Oil 940 are obtained.

The conference call was adjourned at 3:00 PM EST.

Attachment 1

Attendance for 2/3/15 Sequence VG Call

Infineum: Andrew Ritchie, Mike McMillan, Gordon Farnsworth

Ashland: Amol Savant, Tim Caudell

BP Castrol : Timothy Miranda

Ford: Ron Romano

GM : Bruce Matthews

Haltermann : Mark Overaker

SwRI: Dan Worcester, Cole Hudson, Pat Lang, Janet
Buckingham

Intertek: Al Lopez, Bill Buscher

Afton: Ed Altman

TMC: Rich Grundza

Lubrizol: Chris Mileti

Oronite: Jo Martinez

OHT: Jason Bowden

TEI: Zack Bishop, Dan Langto

Neste Oil: Chris Castanien

VG Fuel Batch Matrix Design Recommendation

Statistics Group
January 28, 2015

Lab	SwRI		IAR		LZ
Stand	1	2	1	2	1
Run 1	1009	940	940	1009	940
Run 2	1006-2	1009	1006-2	940	1006-2
Run 3	940	940	1009	1009	1009

- The above recommended matrix is very similar to the 2013 original matrix (which was revised midway through to add tests after modifying the fuel).
 - Same number of stands and oils per stand (thus, same total number of tests).
 - 940 replaces 925-3
 - One lab replaces another
 - Runs 2 and 3 are reversed in order.
 - Above run order provides information on 1006-2 earlier but reduces early re-runs of 940 and 1009.
- As in previous fuel batch matrices, recommend reviewing the results after each Run and re-evaluate if subsequent Runs should be revised.
- Determination of whether to just run 3 tests with RO 940 in Run 1 (and run 1009 later) is a balance between minimizing risk of running extra tests if fuel is mild versus the time constraint. **SP decision**